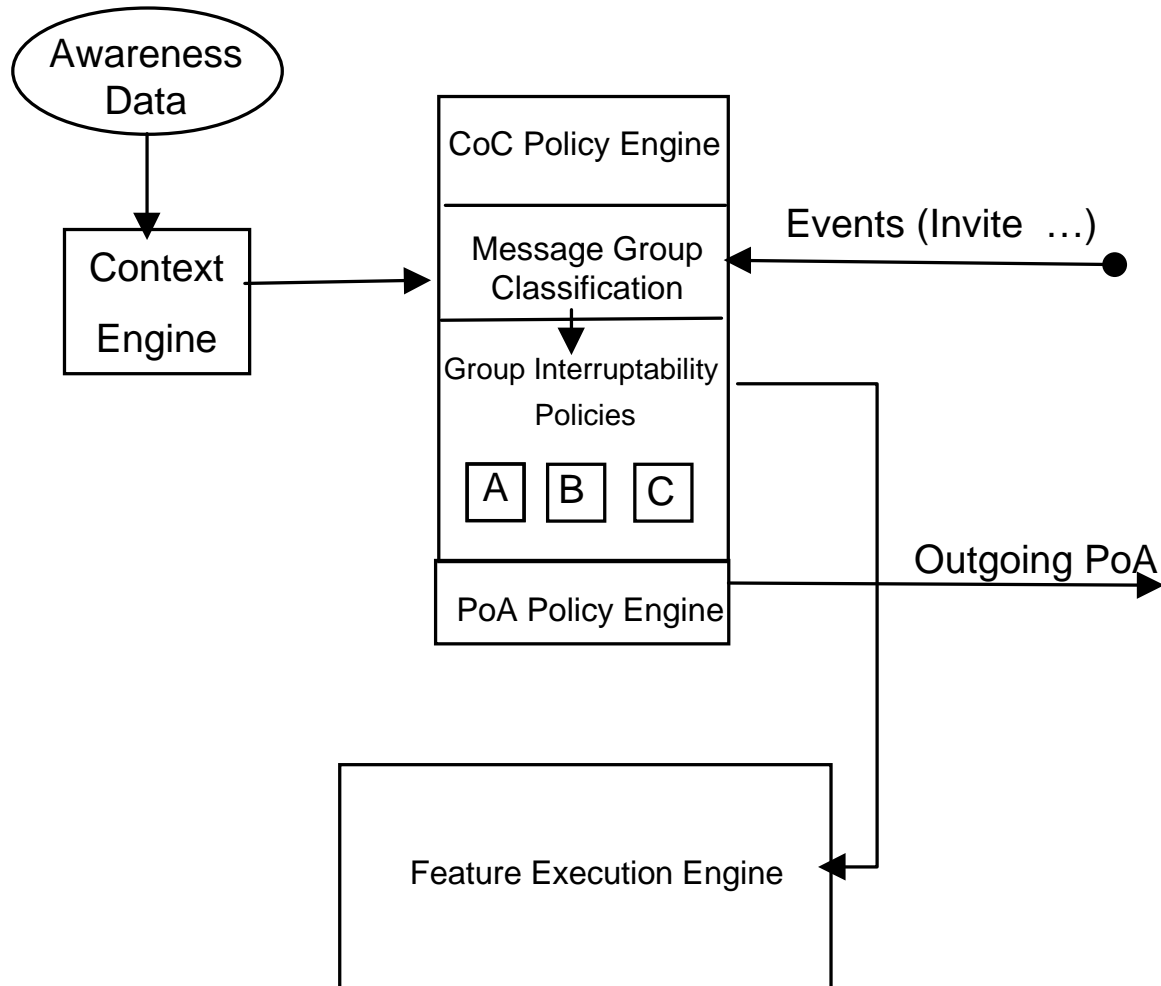


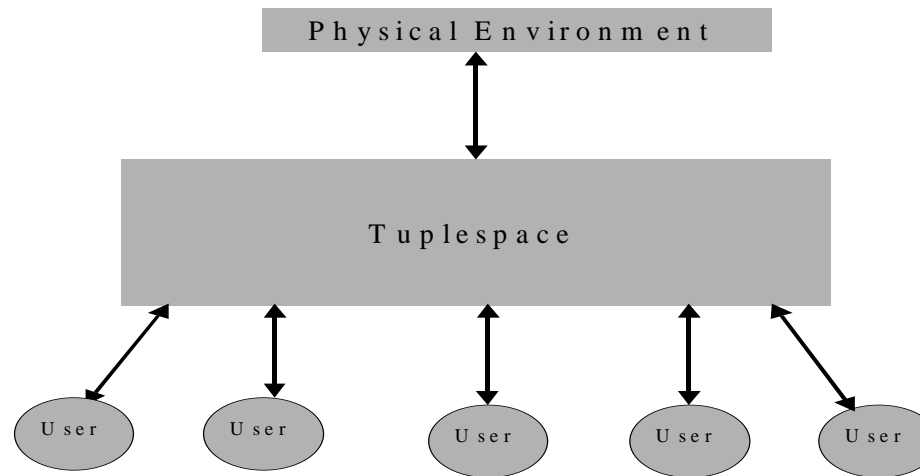
Deontic Policy Trees

Tom Gray

Tri-partite Architecture



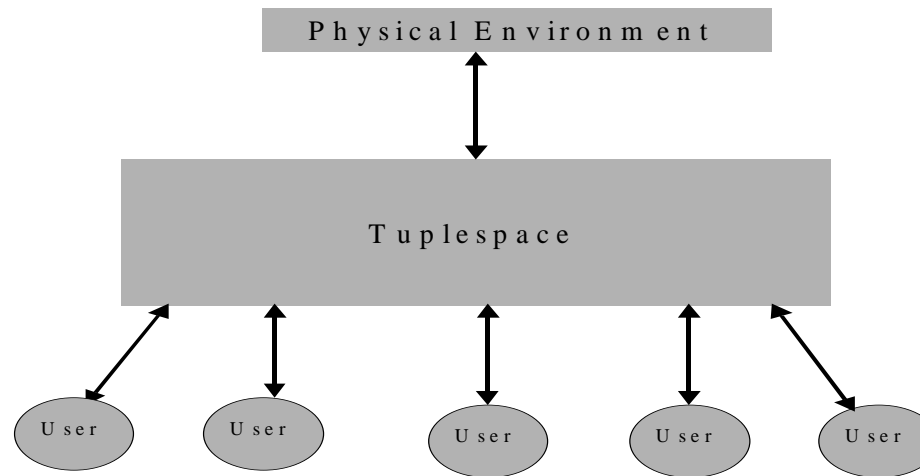
Cooperating Policies



Cooperating Policies

- Policies do not work alone but cooperate by multiple techniques to achieve user goals
- Policies may cooperate:
 - by chaining pre-conditions and post-conditions
 - sharing of data/assertions
- Found that designers had great difficulty in understanding dependencies between policies

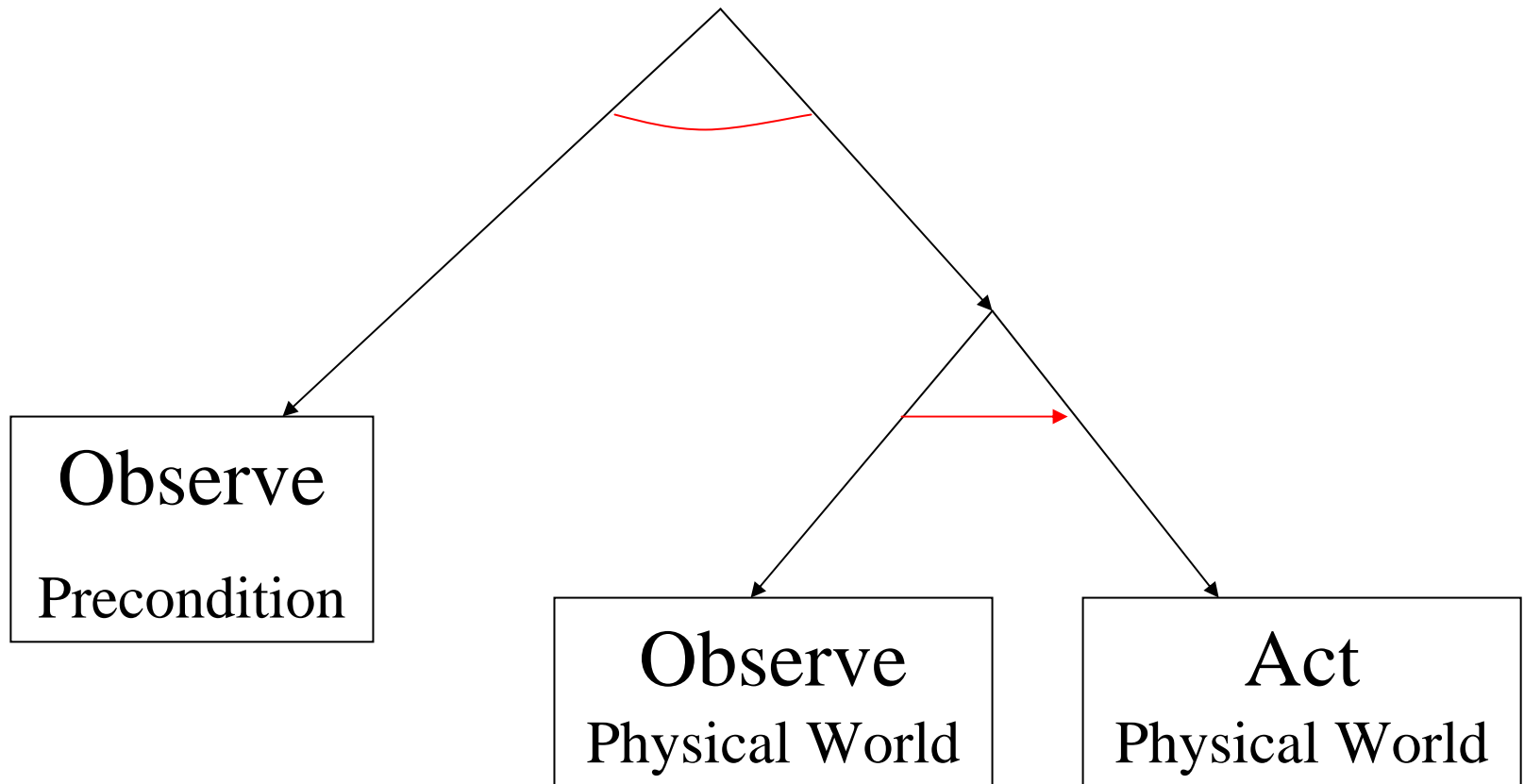
Cooperating Policies



Cooperating Policies

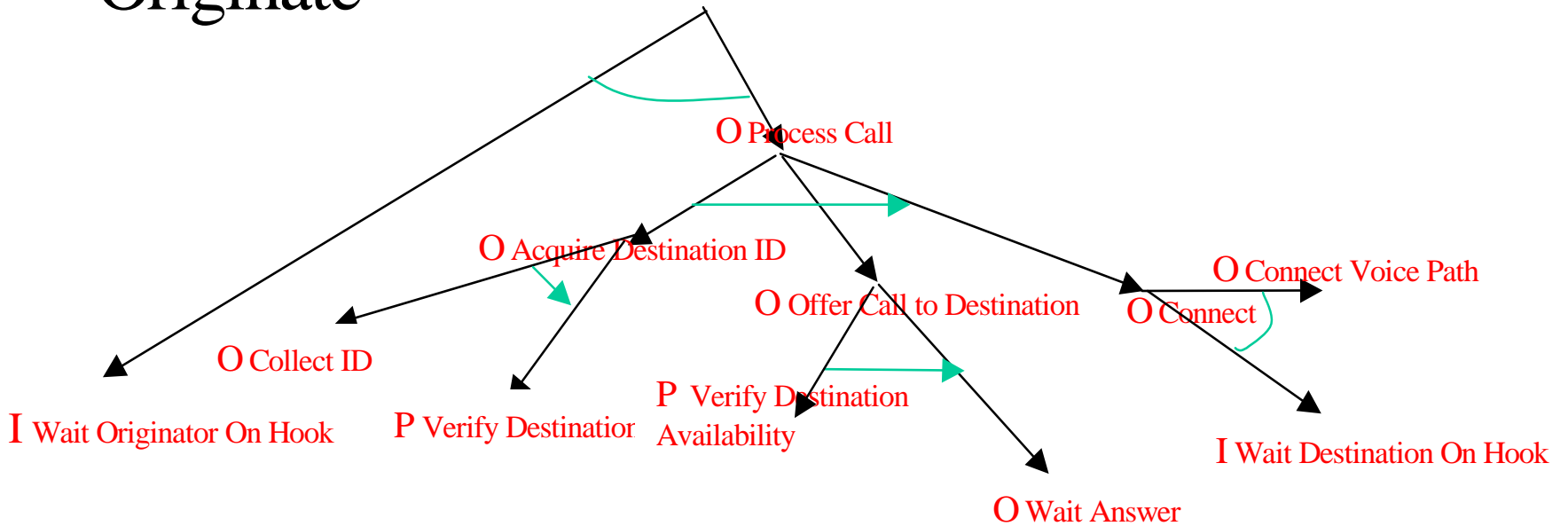
- Creation of trees to improve understanding of dependencies
- Deontic values to allow tree to understand its own success in achieving goals
 - Obligation, Permission, Interdiction
 - Effective for feature interaction detection and resolution
 - features as goals with modulators
 - (especially Permitted value)

Example of a Tree



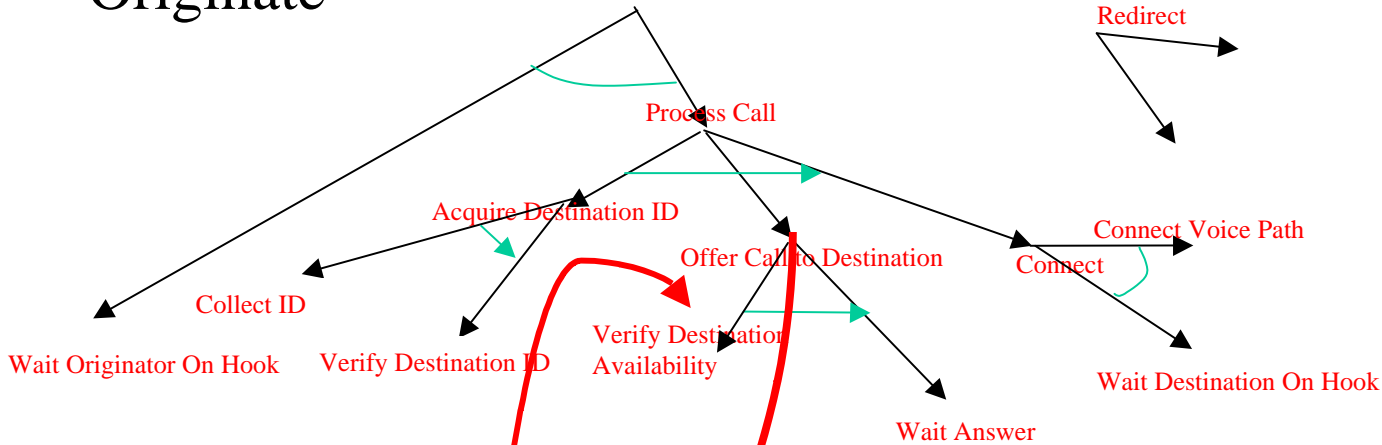
Originate

(Perform (O Originate) (I Redirect))



Originate

(Perform (O Originate))



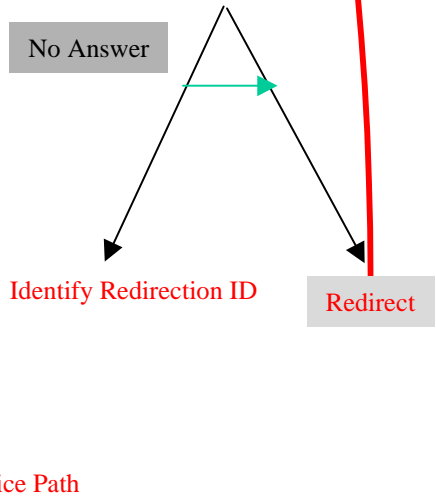
(Perform (O Redirect) (ID 3826))

Available

(Perform (O Terminate))

Terminate

Call Forward



Verify User Availability

Indicate Call

No Answer

Establish Connection

Wait Own On Hook

Connect Voice Path

Wait Originator On Hook